

VegDRI

A Tool to Monitor Long Term Vegetation Stress

The **Vegetation Drought Response Index (VegDRI)** integrates satellite-based observations of vegetation conditions with climate and

biophysical (land cover and soils) information to produce 1-km² spatial resolution maps that monitor the impact of drought stress on vegetation. It was developed by the National Drought Mitigation Center (NDMC) in collaboration with the U.S. Geological Survey's (U.S.GS) Center for Earth Resources Observation and Science (EROS), and the High Plains Regional Climate Center (HPRCC) and with sponsorship by the U.S. Department of Agriculture's (U.S.DA) Risk Management Agency (RMA) and NASA.

VegDRI maps can be used with traditional drought indicators and other in situ measures to help agricultural producers and government officials with various management decisions, such as identifying locations to move livestock for grazing, as well as identifying markets for livestock forage, assessing tree damage and fire risk, and justifying agricultural disaster assistance,

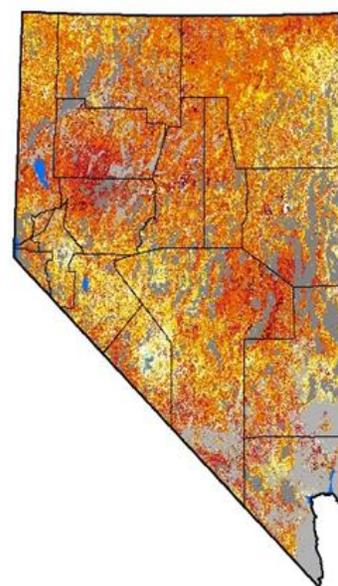
Rangelands

VegDRI information allows ranchers and forage producers to monitor local drought conditions in relation to the larger surrounding area. Ranchers can use the information when weaning cattle to decide to sell or carry over animals. Alfalfa growers and those with pasture to lease in other parts of a region can use VegDRI to identify where to focus their marketing efforts.



Vegetation Drought Response Index
Rangelands: Nevada

August 26, 2013

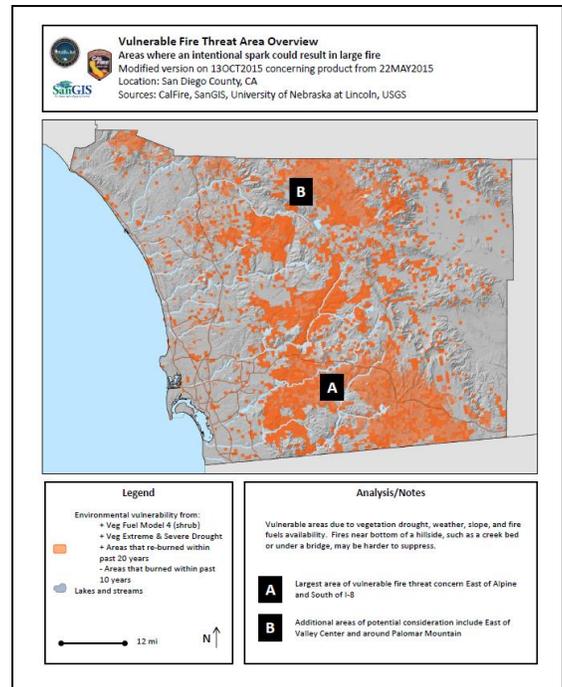


The U.S. Bureau of Land Management (BLM) in Nevada has used VegDRI to determine grazing allotment allocations. The U.S. Drought Monitor and VegDRI are consulted to determine drought afflicted allotments and vegetation condition as it pertains to drought stress.



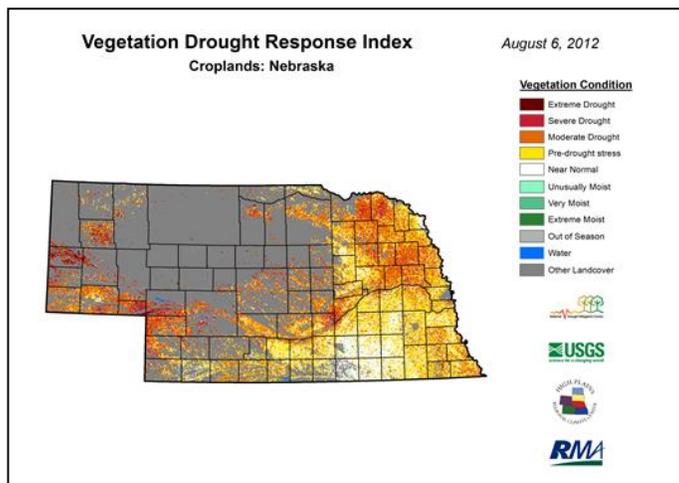
Forestry – Disease/Fire Risks

VegDRI-delineated areas have been shown to correspond with reported wildfires, as well as areas with increased susceptibility of drought-weakened trees to native insects and pathogens. The San Diego Sheriff’s Department has used VegDRI to assess fire risk in the county. It can also be used to designate areas for burn bans.



Crop Monitoring

Insurance companies are working to develop methods that incorporate VegDRI into models that forecast crop yield in the U.S.



VegDRI PRODUCTS AVAILABLE ONLINE - <http://vegdroi.unl.edu/Home.aspx>

A variety of VegDRI products are available to assist agricultural producers and decision makers with planning and mitigation activities.

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FACT SHEET

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